GORǏGene
EMPOWER YOUR RESEARCH

## Product datasheet for MR208198L4

## Eya3 (NM_010166) Mouse Tagged Lenti ORF Clone

## Product data:

Product Type:
Product Name:
Tag:
Symbol:
Synonyms:
Mammalian Cell
Selection:
Vector:
E. coli Selection:

ORF Nucleotide
Sequence:
Restriction Sites:
Cloning Scheme:

## Expression Plasmids

Eya3 (NM_010166) Mouse Tagged Lenti ORF Clone
mGFP
Eya3
Al844637
Puromycin
pLenti-C-mGFP-P2A-Puro (PS100093)
Chloramphenicol ( $34 \mathrm{ug} / \mathrm{mL}$ )
The ORF insert of this clone is exactly the same as(MR208198).

Sgfl-Mlul

Cloning sites used for ORF Shuttling:


----- GGA CTC AGA GIT TGG GTA GGA AGC

* The last codon before the Stop codon of the ORF.
ACCN:
ORF Size:
NM_010166
1581 bp


## OTI Disclaimer:

OTI Annotation:

Components:

Reconstitution Method: 1. Centrifuge at 5,000xg for 5 min .
2. Carefully open the tube and add 100 ul of sterile water to dissolve the DNA.
3. Close the tube and incubate for 10 minutes at room temperature.
4. Briefly vortex the tube and then do a quick spin (less than 5000 xg ) to concentrate the liquid at the bottom.
5. Store the suspended plasmid at $-20^{\circ} \mathrm{C}$. The DNA is stable for at least one year from date of shipping when stored at $-20^{\circ} \mathrm{C}$.

## RefSeq:

RefSeq Size:
RefSeq ORF:
Locus ID:
UniProt ID:
Cytogenetics:
Gene Summary:
The molecular sequence of this clone aligns with the gene accession number as a point of reference only. However, individual transcript sequences of the same gene can differ through naturally occurring variations (e.g. polymorphisms), each with its own valid existence. This clone is substantially in agreement with the reference, but a complete review of all prevailing variants is recommended prior to use. More info

This clone was engineered to express the complete ORF with an expression tag. Expression varies depending on the nature of the gene.
The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).

NM 010166.2
5210 bp
1533 bp
14050
$\mathrm{P97480}$
465.68 cM

Tyrosine phosphatase that specifically dephosphorylates 'Tyr-142' of histone H2AX (H2AXY142ph). 'Tyr-142' phosphorylation of histone H2AX plays a central role in DNA repair and acts as a mark that distinguishes between apoptotic and repair responses to genotoxic stress. Promotes efficient DNA repair by dephosphorylating H2AX, promoting the recruitment of DNA repair complexes containing MDC1 (By similarity). Its function as histone phosphatase probably explains its role in transcription regulation during organogenesis. The phosphatase activity has been shown in vitro. Coactivates SIX1. Seems to coactivate SIX2, SIX4 and SIX5. The repression of precursor cell proliferation in myoblasts by SIX1 is switched to activation through recruitment of EYA3 to the SIX1-DACH1 complex and seems to be dependent on EYA3 phosphatase activity. May be involved in development of the eye. May play a role in mediating the induction and differentiation of cranial placodes.[UniProtKB/Swiss-Prot Function]

## Product images:



